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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Amit S. Phadnis

CSCO-006/2879

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EXAMINER

NGUYEN, BRIAN D

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

03/27/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/910,936	Applicant(s) PHADNIS ET AL.	
	Examiner BRIAN D. NGUYEN	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☒ Claim(s) 26 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 7-9, 14-15, and 20-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Bal et al (6,457,061).

Regarding claim 1, Bal discloses a method of processing a packet in a gateway device (230 in figure 2) connected to a plurality of communication paths providing connection with corresponding networks (see figure 2), the method comprising: providing a search utility in the gateway (230), the search utility enabling the retrieval of both a forwarding information and a network address translation (NAT) information necessary for processing the packet in a single search operation (see col. 5, lines 26-32 and lines 54-63), wherein the NAT information specifies a new address for an original address in the packet (an internal IP address for an external IP address), the forwarding information specifying one of the plurality of communication paths to forward the packet (see port number); receiving the packet containing the original address (see col. 5, lines 26-32 and lines 54-63); determining the forwarding information and the NAT information for the packet in a single search operation by using the search utility (see col. 5, lines 26-32 and lines 54-63); substituting the new address for the original address in the packet (see an internal IP address for an external IP address); and forwarding the packet with the new address

Art Unit: 2616

on the specified one of the plurality of communication paths in the forwarding information (see col. 5, lines 26-32 and lines 54-63).

Regarding claims 2, Bal discloses a single table for both the forwarding and the NAT information (contention list 233 in figure 2).

Regarding claim 7, Bal discloses the forwarding information comprises an interface on the gateway device, wherein the forwarding comprises sending the packet on the interface, wherein the packet is received in the form of an IP packet (see see col. 5, lines 26-32 and lines 54-63).

Regarding claims 8-9 and 20-21, claims 8-9 and 20-21 are apparatus claims that have substantially the same limitations as the respective method claims 1-2. Therefore, they are subject to the same rejection.

Regarding claims 14-15, claims 14-15 are computer readable medium claims that have substantially the same limitations as the respective method claims 1-2. Therefore, they are subject to the same rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-4, 10-11, 16-17, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bal in view of Sloane (6,912,223).

Regarding claims 3-4, 10-11, 16-17, and 22-23, Bal discloses all the claimed subject matter as described in previous paragraph including providing the source address and destination address as a key (see paragraph 0158) except for the table uses a content addressable memory (CAM). However, Sloane discloses the use of CAM (see col. 1, lines 27-35). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the CAM as taught by Sloane in the system of Bal in order to meet the design criteria of a particular implementation.

5. Claims 5-6, 12-13, 18-19, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bal in view of Cunningham et al (6,888,837).

Regarding claims 5, 12, 18, 24, Bal discloses all the claimed subject matter as described in previous paragraphs except for a plurality of tables partitioned according to service domains. However, Cunningham teaches a plurality of tables for overlapping address domains (see tables in figures 2A-2C for domains 1-3). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use different table for different domains in order to resolve ambiguous network addresses across multiple overlapping address domains.

Regarding claim 6, 13, 19, 25, Bal discloses a table includes two domains with non-overlapping addresses (see figure 11).

Allowable Subject Matter

Art Unit: 2616

6. Claims 26-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571) 272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

3/17/08

/Brian D Nguyen/
Primary Examiner, Art Unit 2616